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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,133	10/14/2005	Wa Chu	CHU0101PUSA	1663
22045 7590 06/22/2009 BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075				
EXAMINER				
PATEL, NIHIR B				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/553,133

Applicant(s)

CHU, WA

Examiner

NIHIR PATEL

Art Unit

3772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Response to Amendment

2. The examiner acknowledges the amendment filed on September 30th, 2008. The amendment comprises amending claims 1-11.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims **1, 2, 4-7 and 12-24** are rejected under 35 U.S.C. 102(b) as being anticipated by White (US 4,248,220).

5. **As to claim 1**, White teaches an apparatus that comprises a first portion **14** and a second portion **16**, connecting with each other along at least one common edge (**see figs. 1-3; col. 2 lines 4-30**), flat-foldable along the common edge (**see figs. 1-3**); securing means to secure said first and second portions on the face of a wearer thereby forming an effective respiratory seal as the wearer inhales and releasing the respiratory seal as the wearer exhales (**see figs. 1-3**), the securing means attaching to the face mask at a location substantially away from the periphery of

the face mask to provide a holding force therefrom; and filtering means associated with the first and second portions for filtering inhaled air (see col. 2 lines 4-30).

6. **As to claim 2**, White teaches an apparatus wherein said effective respiratory seal covers a minimum yet essential area of the nose and chin (see figs. 1-3).

7. **As to claim 4**, White teaches an apparatus wherein the securing means comprises an elastic material (see figs. 1-3; col. 2 lines 35-45).

8. **As to claim 5**, White teaches an apparatus wherein the filtering means includes the main body of the face mask made of filtering sheet material (see figs. 1-3; col. 2 lines 4-30).

9. **As to claim 6**, White teaches an apparatus wherein said filtering means includes a filter part integrated in the main body of the face mask (see figs. 1-3; col. 2 lines 4-30).

10. **As to claims 7, 20 and 23**, White teaches an apparatus wherein the filtering means includes a user replaceable filter part (**inherently everything is replaceable**; see col. 4 lines 4-30).

11. **As to claim 12**, White teaches an apparatus that comprises mask body, comprising at least two generally flat parts **14 and 16**, made of air-permeable filter media (see col. 2 lines 4-30), connectable to each other along a vertical, common edge **18**; said mask body being foldable to a first flat configuration for ease of storage and carrying (see fig. 2), and capable of being unfolded to a second, convex open configuration for covering the nose and mouth of a wearer (see fig. 1), forming a tent like appearance with said common edge running from the top to the bottom of the mask body (see figs. 1 and 3); said common edge serving to hold the mask body away from the nose and mouth of the wearer; means for filtering inhaled air (see figs. 1-3; col. 2 lines 4-30); means for securing the mask body against the wearer's face, imposing a force (F),

along said common edge (**see fig. 1**), substantially away from the periphery of the mask body and at an elevation corresponding to the space between the nose and mouth, and directed toward the face of the wearer; wherein the peripheral portions of the mask body are more flexible to accommodate the face shape and provide a respiratory seal with positive pressure applied from the outside during inhalation, while allowing exhaled air to pass easily through the peripheral flexible portions (**see figs. 1-3**).

12. **As to claims 13 and 18**, White teaches an apparatus wherein the means for securing the mask body is an elastic headband or earloop that contacts the mask body along said common edge, substantially away from the periphery of the mask body and at an elevation that corresponds to the space between the nose and mouth (**see figs. 1-3**).

13. **As to claims 14 and 19**, White teaches an apparatus wherein the means for securing the mask body can be attached and released from the mask body by the wearer (**see figs. 1-3; col. 2 lines 35-50**).

14. **As to claim 15**, White teaches an apparatus wherein stiffeners are incorporated into the mask body from the common edge toward the face in the same elevation as said force (F) applied, reinforcing the mask body where stress is strongest and allowing the rest of the mask body to be more flexible (**see figs. 1-3; col. 2 lines 30-45**).

15. **As to claim 16**, White teaches an apparatus wherein the means for securing the mask body is fixed onto the mask body, at location(s) substantially away from the periphery of the face mask and near to said common edge (**see figs. 1-3**).

16. **As to claim 17**, White teaches an apparatus that comprises mask body, comprising at least two generally flat parts **14 and 16** (**see figs. 1-3**), connectable to each other along a vertical,

common edge; said mask body being foldable to a first flat configuration for ease of storage and carrying (see fig. 2), and capable of being unfolded to a second, convex open configuration for covering the nose and mouth of a wearer (see fig. 1), forming a tent like appearance with said common edge running from the top to the bottom of the mask body (see figs. 1 and 3); said common edge serving to hold the mask body away from the nose and mouth of the wearer (see fig. 1); means for securing the mask body against the wearer's face, imposing a force (F), along said common edge (see figs. 1-3; col. 2 lines 35-50), substantially away from the periphery of the mask body and at an elevation corresponding to the space between the nose and mouth, and directed toward the face of the wearer; wherein the mask body is made of non-permeable material and the means for filtering inhaled air includes at least one filter insert which also functions as a stiffener (see col. 2 lines 4-45), said means for filtering inhaled air is integrated in the mask body and the peripheral portions of the mask body are more flexible to accommodate the face shape and provide a respiratory seal with positive pressure applied from the outside during inhalation, while allowing exhaled air to pass easily through the peripheral flexible portions (see col. 2 lines 4-30).

17. **As to claim 21**, White teaches an apparatus wherein the non-permeable material comprises any synthetic or natural material with suitable rigidity and flexibility, such as paper, plastic or leather (see col. 2).

18. **As to claim 22**, White teaches an apparatus wherein said filter insert comprises a filter sheet media secured between a filter holder which is permanently attached to the mask body and a releasable filter guard (see col. 2).

19. **As to claim 24**, White teaches an apparatus wherein the means for securing the mask body is fixed onto the mask body, at location(s) substantially away from the periphery of the face mask and near to said common edge (see figs. 1-3; col. 2 lines 35-50).

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

22. Claims **3 and 8-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over White (US 4,248,220).

23. **As to claim 3**, White substantially discloses the claimed invention; see rejection of claim 1 above, White discloses essential area that is adaptive to an extensive range of face sizes which is defined by eye to chin distance (see figs. 1-3) but does not disclose dimensions within the range from 94 mm to 104 mm. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify White's invention by providing an essential area

that is adaptive to an extensive range of face sizes which is defined by eye to chin distance having dimensions within the range from 94 mm to 104 mm in order to provide the proper fit and comfort to the user, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

24. **As to claims 8-11**, White substantially discloses a method steps comprising first step of folding a roll of sheet material along the length of the sheet material (see col. 2); second step of welding the folded sheet material along a pre-defined edge; and third step of cutting the shape of the face mask in the flat-folded configuration out of the roll of sheet material (see col. 2).

The method steps would have been obvious because they would have resulted from the use of the device of White.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIHIR PATEL whose telephone number is (571)272-4803. The examiner can normally be reached on 7:30 to 4:30 every other Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nihir Patel/
Examiner, Art Unit 3772

/Patricia Bianco/
Supervisory Patent Examiner, Art Unit 3772